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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,543	12/14/2005	Bernard Louis Dit Picard	20126 (429 PCT)	5041

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PATENT GROUP GA030-43  
GEORGIA-PACIFIC LLC  
133 PEACHTREE STREET, N.E.  
ATLANTA, GA 30303-1847

EXAMINER
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VANATTA, AMY B.

ART UNIT	PAPER NUMBER
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3765

MAIL DATE	DELIVERY MODE
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02/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/560,543

Applicant(s)

LOUIS DIT PICARD ET AL.

Examiner

Amy B. Vanatta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26,36 and 37 is/are allowed.
- 6) ☒ Claim(s) 27-34 and 38-42 is/are rejected.
- 7) ☒ Claim(s) 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11152007.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 39-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 is rendered indefinite in reciting that the strip is "interchangeable" since it is unclear with what the strip is interchanged, or exactly in what manner it is "interchangeable". Thus, the scope of the claim is not ascertainable.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 27-34 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Sternlieb et al (US 5,737,813).

Sternlieb et al '813 discloses a process of hydrojet treatment of a web including positioning the web on a porous support in translatory movement or rotating about an axis (see Figs. 2-3) and treating a side of the web with a plurality of streams of water

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(col. 3, lines 27-31). The streams are arranged in a row perpendicular to the direction of movement of the web (see Figs. 2-3). Sternlieb discloses that the streams emitted from the orifices are "columnar" (col. 5, lines 16-29) and the holes are circular, thus forming streams having cylindrical form of constant cross-sections as claimed.

Sternlieb discloses that a combination of jet strips with large and small orifice diameters may be used (col. 6, lines 50-55). Sternlieb teaches the use of a first jet strip with orifice diameters of 0.005", followed by a second jet strip with 0.011 inch diameters (col. 6, lines 64 through col. 7, line 3). The two jet strips form first and second rows of water streams having a first cross-section and a second cross-section different from the first cross-section (i.e. a different size) as in claim 27. Sternlieb also teaches that the jet strips have "randomized narrow/wide spacings between orifices"; this forms "non-constant spacing" as in claim 27. Since the jets include orifices at random spacings, some streams from the first and second rows would inherently be aligned while others would inherently be not in alignment, thus meeting the limitations of claims 31-32. The streams are arranged in two or three rows (at least) as disclosed in col. 6, line 51 through col. 7, line 3. Although the source of the water is not specifically shown in the figures, Fig. 4A shows a main plenum 42 through which water flows, this water being directed into the main plenum by a recirculating pump which returns water under pressure to the manifolds (col. 5, lines 10-15 and 19-21). This pump and its operationally adjacent structures which direct the water to the manifolds (i.e. into plenums 42 of the manifolds) forms a "common injector" to the extent recited in claims 29-30. Regarding claim 38, Sternlieb '813 discloses that the web which is treated in the

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method may comprise cotton, which inherently comprises cellulose (see, e.g., col. 2, lines 32-34).

5. Claims 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Sternlieb et al (2003/0101558).

Sternlieb et al ('558) disclose a non-moving device for hydroentangling a fibrous web as claimed. The device includes perforations to provide a plurality of streams of water; see orifices in strip 30, in Figs. 5-7. The strip comprises orifices ("perforations") of a first cross section and of a second cross section different from the first cross section; see Figs. 5-7 which illustrate orifices having a first cross section and orifices having a second cross section within a single strip 30. These orifices form perforations with different cross sections and are opposite a water distribution line as in claim 39. See paragraph 0021, disclosing that the size, number and/or orientation of the orifices may be varied; paragraph 0039 disclosing that the distances (spacing) between openings is varied; and paragraphs 0117 and 0123, disclosing that the orifices may be variably spaced and sized. Regarding claims 40-41, Fig. 7 depicts an embodiment in which two rows may be seen. That is, if an imaginary line were drawn through strip 30 from left to right dividing strip 30 into a top half and a bottom half (as viewed in Fig. 7), the top half contains orifices forming a first row and the bottom half contains orifices forming a second row. The rows contains streams of a first cross section and streams of a second cross section different from the first cross section (i.e. some orifices have cross-sections which are longer than others or are angled forwardly versus angled

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backwardly). Sternlieb discloses two different types of orifices in Fig. 8, i.e. orifice 42 which has a constant cross-section formed by parallel side walls, and orifice 43 which has a varying cross section formed by angled side walls. Sternlieb teaches that the invention may be practiced either with elongated orifices similar to orifice 42 or with relieved orifices similar to orifice 43 (paragraph 0130). Thus, in the case of the former (i.e. using orifices such as 42 in Fig. 8), the orifices have constant cross-sections as in claim 39. The strip 30 disclosed by Sternlieb is shown as mounted to the bottom of a manifold 10. The strip is inherently "interchangeable" to the extent recited in claim 39, since it can be physically removed from the manifold and a different strip installed.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sternlieb et al (2003/0101558).

Sternlieb et al '558 disclose a device as claimed, however the diameter of the cross-sections of the orifices is not disclosed as ranging from 80-200  $\mu\text{m}$ . It is within the ordinary skill in the art to determine the optimal size for the orifices based upon routine experimentation, depending upon various factors such as the water pressure, the speed of processing, the type of fabric being treated and desired fabric effects. It would have

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been obvious to one having ordinary skill in the art at the time the invention was made to construct the orifices in the device of Sternlieb '558 having diameters in the range of 80-200  $\mu\text{m}$ , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

8. Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sternlieb et al (2003/0101558) in view of Sternlieb (US 5,737,813).

As set forth in section 4 above, Sternlieb '558 discloses a device as claimed. The strip 30 disclosed by Sternlieb is shown as mounted to the bottom of a manifold 10. The strip is inherently "interchangeable" to the extent recited in claim 39, since it can be physically removed from the manifold and a different strip installed. In the case that such a removal requires a deconstruction which would render the device inoperable, it should be noted that providing a removable strip which is easily interchangeable with a different strip is well known in the art. Sternlieb '813 discloses a similar process and apparatus for hydrojet treatment of a fabric web, and this patent discloses a manifold 40 having a removably interchangeable jet strip 48 (see Fig. 4A and col. 5, lines 16-29). Sternlieb '813 teaches that a removable jet strip is well known in the industry (col. 5, lines 25-27) and permits changing of the jet strip for different effects on the fabric (col. 5, lines 27-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an interchangeable jet strip in the device of

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Sternlieb '558 in order to permit changing of the jet strip for varying the effects on the fabric, as taught by Sternlieb '813.

As to claim 42, as set forth in paragraph 6 above, it is within the ordinary skill in the art to determine the optimal size for the orifices based upon routine experimentation, depending upon various factors such as the water pressure, the speed of processing, the type of fabric being treated and desired fabric effects. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the orifices in the device of Sternlieb '558 having diameters in the range of 80-200  $\mu\text{m}$ , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

#### ***Allowable Subject Matter***

9. Claims 26, 36, and 37 are allowed.
10. Claim 35 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

11. Applicant's arguments with respect to claims 27-34 and 38 have been considered but are moot in view of the new ground(s) of rejection.



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12. Applicant's arguments filed 11/14/07 with respect to claims 39-41 have been fully considered but they are not persuasive with regard to Sternlieb '558. Applicant argues that in the device of Sternlieb, the orifices of the strip can be of a first type (orifice 42 of Figs. 8-9) or second type (orifice 43, Figs. 8 and 10), and since the orifices 43 do not have a constant cross-section, the claim limitations are not met. It is noted, however, that Sternlieb discloses that the invention may be practiced *either* with elongated orifices 42 or with relieved orifices 43 (paragraph 0130). Thus, Sternlieb fully discloses the use of elongated orifices 42 as the orifices in the jet strip, and these orifices have constant cross-sections as in claim 39.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

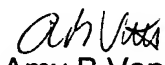
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Amy B Vanatta  
Primary Examiner  
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